

E HU SONG/AU 25  
L1 56 S (E3)  
E ZHONG MIN/AU 25  
L2 116 S (E3)  
L3 1 S L2 AND SERINE  
L4 1 S L3 AND ANTIBOD?  
E LADUNGA ISTVAN/AU 25  
L5 21 S (E3)

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 15:27:28 ON 01 NOV 2006  
L6 16410 S SERINE (S) PROTEASE (S) INHIBITOR?  
L7 248 S L6 (S) ANTIBOD?  
L8 102 DUP REM L7 (146 DUPLICATES REMOVED)  
L9 102 SORT L8 PY A



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- If making selections (e.g., Subheadings, etc.), use the Send to Search Box feature to see PubMed records with those specifications.
- Select PubMed under the Links menu to retrieve all records for the MeSH Term.
- Select NLM MeSH Browser under the Links menu for additional information.

### 1: Serpins

Links

A family of serine proteinase inhibitors which are similar in amino acid sequence and mechanism of inhibition, but differ in their specificity toward proteolytic enzymes. This family includes alpha 1-antitrypsin, angiotensinogen, ovalbumin, antiplasmin, alpha 1-antichymotrypsin, thyroxine-binding protein, complement 1 inactivators, antithrombin III, heparin cofactor II, plasminogen inactivators, gene Y protein, placental plasminogen activator inhibitor, and barley Z protein. Some members of the serpin family may be substrates rather than inhibitors of SERINE ENDOPEPTIDASES, and some serpins occur in plants where their function is not known.

Year introduced: 1990

Subheadings: This list includes those paired at least once with this heading in MEDLINE and may not reflect current rules for allowable combinations.

administration and dosage  adverse effects  analysis  biosynthesis  blood  
 cerebrospinal fluid  chemical synthesis  chemistry  classification  
 deficiency  diagnostic use  drug effects  genetics  history  immunology  
 isolation and purification  metabolism  pharmacokinetics  pharmacology  
 physiology  radiation effects  secretion  therapeutic use  toxicity  
 ultrastructure  urine

Restrict Search to Major Topic headings only

Do Not Explode this term (i.e., do not include MeSH terms found below this term in the MeSH tree).

#### Entry Terms:

- Serpin Superfamily
- Superfamily, Serpin

#### Previous Indexing:

- Enzyme Inhibitors (1968-1978)

- Protease Inhibitors (1979-1989)

Pharmacologic Action:

- Serine Proteinase Inhibitors

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Chemicals and Drugs Category

Amino Acids, Peptides, and Proteins

Proteins

**Serpins**

alpha 1-Antichymotrypsin

alpha 1-Antitrypsin

Angiotensinogen

Antiplasmin

Antithrombins

Antithrombin III

Heparin Cofactor II

Hirudins

Complement C1 Inactivator Proteins

HSP47 Heat-Shock Proteins

Ovalbumin

Plasminogen Inactivators

Plasminogen Activator Inhibitor 1

Plasminogen Activator Inhibitor 2

Protein C Inhibitor

Thyroxine-Binding Proteins

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Oct 27 2006 11:59:43

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OM protein - protein search, using sw model

Run on: October 21, 2006, 01:15:26 ; Search time 615 Seconds  
(without alignments)  
610.782 Million cell updates/sec

Title: US-09-903-582-2  
Perfect score: 1315  
Sequence: 1 MKPGGFWLHLTLGASLPAA.....YNSDSSLTLREFYMAFRQKC 246

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 8366291 seqs, 1526956180 residues

Total number of hits satisfying chosen parameters: 8366291

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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4	1315	100.0	246	41	US-11-124-368A-170	Sequence 170, App
5	1292	98.3	243	1	PCT-US02-21670-4	Sequence 4, Appli
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7	1292	98.3	491	41	US-11-166-372-2150	Sequence 2150, Ap
8	1292	98.3	491	41	US-11-166-372A-2150	Sequence 2150, Ap
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20	1292	98.3	842	34	US-10-428-275-252	Sequence 252, App
21	1292	98.3	842	34	US-10-428-275-270	Sequence 270, App
22	1292	98.3	842	34	US-10-428-275-278	Sequence 278, App
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27	1292	98.3	846	31	US-10-189-940-148	Sequence 148, App
28	1292	98.3	846	34	US-10-428-275-242	Sequence 242, App
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34	1288	97.9	837	34	US-10-428-275-244	Sequence 244, App
35	1288	97.9	837	39	US-10-971-479-126	Sequence 126, App
36	1287	97.9	842	34	US-10-428-275-276	Sequence 276, App
37	1284	97.6	842	34	US-10-428-275-274	Sequence 274, App
38	1269	96.5	838	1	PCT-US01-04098A-3151	Sequence 3151, Ap polle)
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43	1176	89.4	824	34	US-10-428-275-248	Sequence 248, App
44	1176	89.4	824	39	US-10-971-479-128	Sequence 128, App
45	1174	89.3	820	34	US-10-428-275-272	Sequence 272, App

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ID AAB19727 standard; protein; 842 AA.  
XX  
AC AAB19727;  
XX  
DT 19-FEB-2001 (first entry)  
XX  
DE Human SECX Clone 4324229-2 encoded protein.  
XX  
KW SECX; human; diagnosis; therapy; surface adhesion protein; antitumour;  
KW neurological disorder; developmental disorder.  
XX  
OS Homo sapiens.  
XX  
PN WO200061754-A2. - (02(a))  
XX  
PD 19-OCT-2000.  
XX  
PF 07-APR-2000; 2000WO-US009392.  
XX  
PR 09-APR-1999; 99US-0128514P.  
PR 03-MAR-2000; 2000US-0186592P.  
PR 06-APR-2000; 2000US-00544511. - (02(e))  
XX  
PA (CURA-) CURAGEN CORP.  
XX  
PI Fernandez E, Vernet C, Shimkets R;  
XX  
DR WPI; 2000-679487/66.  
DR N-PSDB; AAA88796.  
XX  
PT SECX polypeptides and the nucleic acids that encode them, useful for  
PT diagnosing, preventing and treating e.g. cancers, inflammation, arthritis  
PT and immunological disorders.  
XX  
PS Claim 1; Fig 8; 143pp; English.  
XX  
CC The present sequence is that of surface adhesion protein-like variant  
CC encoded by SECX Clone 4324229-2 (see AAA88796). High expression was  
CC detected in the lung. The invention provides novel SECX polynucleotides  
CC (see AAA88789-804) and the secreted or membrane-associated proteins  
CC encoded by them (see AAB19720-34). SECX polynucleotides, polypeptides and  
CC antibodies can be used in the detection, diagnosis and treatment  
CC (including gene therapy) of a broad range of pathological states.  
CC Therapeutic indications for targeting 4324229 include selected lung,  
CC breast and ovarian carcinomas. 4324229 has similarity to human limbic  
CC system associated membrane protein (LAMP) and may therefore be important  
CC in nerve growth and differentiation, epilepsy, Alzheimer's disease and  
CC schizophrenia. It also shows similarity to portions of human Down  
CC syndrome-cell adhesion molecule (DS-CAM2), and may therefore be useful in  
CC the detection, diagnosis and therapy of developmental and neurological  
CC abnormalities such as Down syndrome, mental retardation,  
CC holoprosencephaly, agenesis of the corpus callosum and schizencephaly  
XX  
SQ Sequence 842 AA;

Query Match 98.3%; Score 1292; DB 3; Length 842;  
Best Local Similarity 99.6%; Pred. No. 1.3e-112;  
Matches 242; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy 61 LLASCGKKFCSRGSRCVLSRKTGEPECQCLEACRPSYVPVCGSDGRFYENHCKLHRAACL 120  
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Db 121 LGKRITVIHSKDCFLKGDTCTMAGYARLKNVLLALQTRLQPLQEGDSRQDPASQKRLLVE 180

Qy 181 SLFRDLDADGNNGHLSSSELAQHVLKKQDLDEDLLGCSPGDLLRFDDYNSDSSLTLREFYM 240  
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Db 181 SLFRDLDADGNNGHLSSSELAQHVLKKQDLDEDLLGCSPGDLLRFDDYNSDSSLTLREFYM 240

Qy 241 AFR 243  
||:  
Db 241 AFQ 243